

Serial No. 10/081,913

Page 2

REMARKS/ARGUMENTS

Claims 2-3 and 4-8 are pending in the application. Claims 1-2 and 4-6 have been allowed. Claim 7 has been rejected and claim 8 has been objected to as being dependent from a rejected independent claim but would be allowable if written in independent form.

Applicants thankfully acknowledge Notice of Allowance of claims 1-2 and 4-6.

Claim 7 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rusch (U.S. Patent No. 5,148,986) in view of Daiket et al. (GB 2,111,420) and further in view of Trapani et al. (U.S. Patent No. 5,014,916) or Stasi et al. (U.S. Patent No. 5,275,336). Applicants respectfully maintain that the rejection improperly ignores claim limitations. Claim 7 recites "wherein a portion of said air cap extends over said outer tube in radially outwardly spaced relationship thereto to define an annular cylindrical air gap between said inner surface of said air cap and said cylindrical outer surface of said outer tube, said air gap coupled to a source of high velocity air for developing a column of air within said air gap which travels along said air cap toward said discharge opening and provides a boundary of air flowing along said inner surface of said air cap to protect said inner surface from exposure to the heat of the combustion chamber flame and molten metal feed wire material." The Examiner's attention is respectfully directed to Figure 3 of the instant application, numeral 124 which corresponds to the claimed "air gap", and to the instant application in paragraph 0031 which describes the air gap 124 and the column of air produced thereby which protects the air cap.

Rusch '986 discloses oxygen and combustion channels 90, 92 respectively which are mixed at 87 and then discharged through an opening in tube 76 and into nozzle number 32. Rusch '986 does not disclose an air gap connected to an air source to produce a protective air column along the surface of the air cap. No prima facie case of obviousness has been established.

In view of the above remarks, Applicants respectfully request reconsideration and allowance of all the claims now in the case.

Respectfully submitted,



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